

Write the following information in the first page of Answer Script before starting answer

ODD SEMESTER EXAMINATION: 2020-21

Exam ID Number _____

Course _____ Semester _____

Paper Code _____ Paper Title _____

Type of Exam: _____ (Regular/Back/Improvement)

Important Instruction for students:

1. Student should write objective and descriptive answer on plain white paper.
2. Give page number in each page starting from 1st page.
3. After completion of examination, Scan all pages, convert into a single PDF, rename the file with Class Roll No. (2019MBA15) and upload to the Google classroom as attachment.
4. Exam timing from 10am – 1pm (for morning shift).
5. Question Paper will be uploaded before 10 mins from the schedule time.
6. Additional 20 mins time will be given for scanning and uploading the single PDF file.
7. Student will be marked as ABSENT if failed to upload the PDF answer script due to any reason.

B.Sc. BOTANY
THIRD SEMESTER
DIVERSITY OF CRYPTOGRAMS
BSB - 731

Duration : 3 hrs.

Full Marks : 70

[PART-A: Objective]

Time : 20 min.

Marks : 20

Choose the correct answer from the following:

1×20=20

1. Which of the following division is the first vascular land plant
 - a. Pteridophyta
 - b. Gymnosperm
 - c. Bryophyta
 - d. Thallophyta
2. *Marchantia* belongs to which of the following division
 - a. Gymnosperm
 - b. Algae
 - c. Bryophyta
 - d. Pteridophyta
3. Protoxylem type of stele is seen in
 - a. *Equisetum*
 - b. *Lycopodium*
 - c. *Riccia*
 - d. *Selaginella*
4. Heterospores are seen in
 - a. *Riccia*
 - b. *Lycopodium*
 - c. *Marchantia*
 - d. *Selaginella*
5. In which of the following species first vascular bundles are seen in
 - a. *Lycopodium*
 - b. *Chlamydomonas*
 - c. *Riccia*
 - d. *Puccinia*
6. Green algae belong to group
 - a. Chlorophyceae
 - b. Cyanophyceae
 - c. Phaeophyceae
 - d. Euglenophyceae
7. *Ectocarpus* belongs to group
 - a. Bacillariophyceae
 - b. Phaeophyceae
 - c. Chlorophyceae
 - d. Xanthophyceae
8. Globules and nucleus are found in
 - a. *Nostoc*
 - b. *Volvox*
 - c. *Spirogyra*
 - d. *Chara*
9. The colony of *Volvox* is called
 - a. Mucilage
 - b. Flagella
 - c. Gelatinous sheath
 - d. Coenobium
10. Algae are
 - a. Authotrophs
 - b. Heterotrophs
 - c. Both "a" and "b"
 - d. None

11. What causes algae colours
- a. Presence of cellulose
 - b. Presence of protein
 - c. Presence of different pigments
 - d. Presence of starch
12. Algae belongs to kingdom
- a. Protista
 - b. Monera
 - c. Animalia
 - d. Plantae
13. Cyanophyceae are
- a. Eukaryotic
 - b. Prokaryotic
 - c. Both "a" and "b"
 - d. None
14. An example of lichen is
- a. *Agaricus bisporous*
 - b. *Cladonia rangiferina*
 - c. *Pleurotus ostreatus*
 - d. *Ectocarpus fasciculatus*
15. Graphis is a
- a. Crustose lichen
 - b. Foliose lichen
 - c. Fruticoselichen
 - d. None of these
16. Rod shaped bacteria are known as-
- a. Coccus
 - b. Spirillum
 - c. Bacillus
 - d. Vibrio
17. Growth rate of bacteria is maximum during-
- a. Lag phase
 - b. Log phase
 - c. Stationary phase
 - d. Death phase
18. Sex pilus is formed during
- a. Conjugation
 - b. Transformation
 - c. Transduction
 - d. None of these
19. Bacteria involved in natural gas production is-
- a. Acetobacter
 - b. Bacillus
 - c. Micrococcus
 - d. Methanobacillus
20. Azotobacter is a
- a. Symbiotic nitrogen fixing bacteria
 - b. Symbiotic ammonifying bacteria
 - c. Non- Symbiotic nitrogen fixing bacteria
 - d. Non- Symbiotic ammonifying bacteria

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(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Write about general characters of Fungi. 10

2. Write short notes on 5+5=10
 - a. Protonema
 - b. Prothallus

3. Write the general characteristics of Cyanophyceae. 10

4. Describe the different types of reproduction occurring in Bacteria. 10

5. Draw and describe life cycle of *Selaginella*. 4+6=10

6. Write about economic importance of Bacteria. 10

7. Write about anatomy of *Marchantia* thallus. 10

8. Write about economic importance of algae. 10

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